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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,743	09/15/2003	Elbert L. McKague JR.	TA-00491C	1536

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BRACEWELL & PATTERSON, L.L.P.
P. O. Box 61389
Houston, TX 77208-1389

EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,743

Applicant(s)

MCKAGUE ET AL.

Examiner

Andrew T Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-42 is/are pending in the application.
- 4a) Of the above claim(s) 26-28, 31-35 and 38-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29, 30, 36 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/15/3002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1, claims 26-28, 33-35 and 40-42, wherein both outer skins are formed from layers of fibers impregnated (infused) with a resin.

Species 2, claims 30 and 37, wherein both outer skins are formed from layers of fibers unimpregnated with a resin.

Species 3, claims 31-32 and 38-39, wherein an outer skin is formed from at least one layer of fibers impregnated with a resin and from at least one layer of fibers unimpregnated with a resin.

2. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 29 and 36 are generic.

3. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

4. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

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the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. During a telephone conversation with James Bradley on 6/1/2004 a provisional election was made to prosecute the invention of Species 2, claims 30 and 37. Claims 29 and 36 are generic. Affirmation of this election must be made by applicant in replying to this Office action. Claims 26-28, 31-35 and 38-42 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

8. The disclosure is objected to because of the following informality: The specification fails to mention the current status of Application Serial No. 09/755,221, now abandoned. Appropriate correction is requested.

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Claim Objections

9. Claim 29 is objected to because of the following informality: Two periods end the claim.

Appropriate correction is requested.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 29-30 and 36-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 29 and 36 claim a pair of outer skins each formed from composite layers. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification is silent regarding “composite layers.”

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 29-30 and 36-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 29 and 36, it is not clear how the structural component is “adapted to be cured within a mold.”

14. Claims 36 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. The term "tubular configuration" is unclear. It is not clear if the configuration is in the shape of a tube (hollow cylinder) or in a shape resembling a tube.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 29-30 and 36-37 are rejected under 35 U.S.C. 102(b) as being anticipated by French Patent No. 1,262,381 to Parsons Corporation (hereinafter referred to as Parsons).

Regarding claims 29-30 and 36-37, Parsons discloses a pre-cured structural component comprising a pair of outer skins, each formed from composite layers of fibers that include a layer of collimated fibers (woven structure includes collimated fibers), a plurality of removable mandrels located between the outer skins, and a plurality of inner supports carried by the mandrels, each of the inner supports formed of composite layers of fabric that include a layer of collimated fibers, the inner supports having surfaces in contact with the outer skins to couple the outer skins together and wherein the structural component is adapted to be cured within a mold (see entire translation document including page 4, line 26 through page 5, line 46 and the Figures).

Regarding claims 30 and 37, Parsons discloses that the layers of the outer skins may be unimpregnated with resin (page 4, lines 26-37).

Regarding claims 36 and 37, Parsons discloses that composite socks enclose each of the mandrels, each of the socks being braided into a tubular configuration and including a plurality

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of fibers (page 4, line 26 through page 5, line 46 and Figure 6). Figure 6 clearly indicates that the inner support fabric has a tubular configuration.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 29-30 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,469,686 to Pykiet in view of French Patent No. 1,262,381 to Parsons.

Regarding claims 29-30 and 36-37, Pykiet discloses a pre-cured structural component comprising a pair of outer skins, each formed from composite layers of fibers that include a layer of fibers, a plurality of removable mandrels located between the outer skins, and a plurality of inner supports carried by the mandrels, each of the inner supports formed of composite layers of fabric that include a layer of fibers, the inner supports having surfaces in contact with the outer skins to couple the outer skins together and wherein the structural component is adapted to be cured within a mold (see entire document including column 2, lines 30-51 and Figure 2).

Pykiet does not specifically mention the use of collimated fibers, but Parsons discloses that it is known in the art to use a woven fabric (collimated fibers present) in the outer skins as well as in the inner supports of a structural component (see entire translation document including page 4, lines 26-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the fibers of Pykiet from any suitable fibrous material,

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such as woven fabric, as taught by Parsons, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

Regarding claims 30 and 37, Pykiet discloses that the layers of the outer skins may be unimpregnated with resin by disclosing that the outer skins can comprise a fabric that exhibits thermoset or thermoplastic properties or the material can alternatively be impregnated with thermoset prepreg material (column 2, lines 43-51).

Regarding claims 36 and 37, Pykiet discloses that composite socks enclose each of the mandrels, each of the socks being braided into a tubular configuration and including a plurality of fibers (column 2, lines 30-51 and Figure 2). Figure 2 clearly indicates that the inner support fabric (224) has a tubular configuration.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

 7/9/04
ANDREW T. PIZIALI
PATENT EXAMINER


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700